

Title (en)  
APPARATUS FOR LEVELING PHOTOVOLTAIC ARRAYS

Title (de)  
VORRICHTUNG ZUR NIVELLIERUNG VON PHOTOVOLTAIKANLAGEN

Title (fr)  
APPAREIL DE NIVELLEMENT D'ENSEMBLES DE PANNEAUX PHOTOVOLTAÏQUES

Publication  
**EP 2449599 A2 20120509 (EN)**

Application  
**EP 10747093 A 20100702**

Priority

- US 2010040986 W 20100702
- US 35158610 P 20100604
- US 25500409 P 20091026
- US 27012209 P 20090702
- US 59493509 A 20091006

Abstract (en)  
[origin: WO2011019460A2] A system and method are disclosed for quickly and easily assembling PV modules into a PV array in a sturdy and durable manner. In examples of the present technology, the system includes various couplings having a first engaging portion adapted to engage a first PV module and a second engaging portion adapted to engage a second PV module. At least one of the engaging portions allows variable positioning of the engaged PV module along the engaging portion.

IPC 8 full level  
**H01L 31/042** (2014.01); **H01L 31/048** (2014.01); **H02S 20/23** (2014.01)

CPC (source: CN EP KR US)  
**F16B 5/10** (2013.01 - US); **F24S 25/10** (2018.04 - EP US); **F24S 25/16** (2018.04 - EP US); **F24S 25/20** (2018.04 - CN EP US); **F24S 25/61** (2018.04 - CN EP US); **F24S 25/613** (2018.04 - CN); **F24S 25/632** (2018.04 - EP US); **F24S 25/636** (2018.04 - EP US); **F24S 25/65** (2018.04 - EP US); **F24S 25/67** (2018.04 - CN EP US); **F24S 25/70** (2018.04 - CN EP US); **H01L 31/046** (2014.12 - KR); **H01L 31/0508** (2013.01 - KR); **H02S 20/00** (2013.01 - KR); **H02S 20/23** (2014.12 - EP US); **H02S 30/00** (2013.01 - KR); **H02S 30/10** (2014.12 - KR); **F24S 2025/02** (2018.04 - CN); **F24S 2025/6006** (2018.04 - EP US); **Y02B 10/10** (2013.01 - EP US); **Y02B 10/20** (2013.01 - EP US); **Y02E 10/47** (2013.01 - EP US); **Y02E 10/50** (2013.01 - EP KR); **Y10T 403/553** (2015.01 - EP US); **Y10T 403/70** (2015.01 - EP US)

Citation (search report)  
See references of WO 2011022125A2

Cited by  
US10079570B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2011019460 A2 20110217; WO 2011019460 A3 20110818**; AU 2010286953 A1 20120209; AU 2010286953 B2 20150507; CN 103081119 A 20130501; CN 103081119 B 20160615; CN 104247039 A 20141224; CN 104247039 B 20170405; EP 2449596 A2 20120509; EP 2449596 B1 20180530; EP 2449598 A2 20120509; EP 2449598 B1 20180530; EP 2449599 A2 20120509; EP 2449599 B1 20180815; KR 101743160 B1 20170602; KR 20120098589 A 20120905; US 2012125410 A1 20120524; US 2012255598 A1 20121011; US 2012260972 A1 20121018; US 2012279558 A1 20121108; US 2012298186 A1 20121129; US 2013180572 A1 20130718; US 2013180573 A1 20130718; US 2013180574 A1 20130718; US 2013183084 A1 20130718; US 8375654 B1 20130219; US 9243817 B2 20160126; US 9447801 B2 20160920; US 9574588 B2 20170221; WO 2011022125 A2 20110224; WO 2011022125 A3 20110901; WO 2011025585 A2 20110303; WO 2011025585 A3 20110901

DOCDB simple family (application)  
**US 2010040984 W 20100702**; AU 2010286953 A 20100702; CN 201080036846 A 20100702; CN 201080037446 A 20100702; EP 10730338 A 20100702; EP 10735370 A 20100702; EP 10747093 A 20100702; KR 20127002984 A 20100702; US 2010040981 W 20100702; US 2010040986 W 20100702; US 201213351397 A 20120117; US 201213370612 A 20120210; US 201213405118 A 20120224; US 201213407607 A 20120228; US 201213410149 A 20120301; US 201213413329 A 20120306; US 201213415669 A 20120308; US 201213421797 A 20120315; US 201213434420 A 20120329; US 201213489680 A 20120606